



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,213	01/29/2002	Panu Pietikainen	290.796USN	6793
33369	7590	05/24/2006	EXAMINER	
FASTH LAW OFFICES (ROLF FASTH) 26 PINECREST PLAZA, SUITE 2 SOUTHERN PINES, NC 28387-4301			SHAW, PELING ANDY	
			ART UNIT	PAPER NUMBER
			2144	

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/913,213

Applicant(s)

PIETIKAINEN, PANU

Examiner

Peling A. Shaw

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

pas

**DETAILED ACTION**

1. Amendment received on 02/13/2006 has been entered. Claim 1 is amended. Claims 1-10 are still pending.
2. The specification and claims were amended after ISR was issued. The amended specification and claims were examined. There was no new matter introduced. The amended specification and claims were accepted.

***Priority***

3. This application is a 371 of PCT/FI00/00075 filed on 02/02/2000 with a priority FINLAND # 990265 on 02/10/1999. The filing date is 01/29/2002.

***Claim objections***

4. Claim 1 is objected to because of the following informalities:
  - a. Claim 1 has listed item e, i.e. "e)", twice, the second item e should be re-labeled as item f, i.e. "f)".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112, second paragraph***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 6 and 8 are rejected under 35 U.S.C. 112, second paragraph as following:

- a. Claim 1 recites the limitation of "... TCP and/or port data, ..." in item b and "... d) optionally, and before or after step c) ...". It makes the claim unclear if "and" or "or" is going to be used for the interpretation of the claim. For the purpose of applying art,

Art Unit: 2144

- claim 1 is read as "... TCP and port data, ..." and "... d) optionally, and before step c) ...".
- b. Claim 6 recites the limitation of "...and possible other parameters". It makes the claim unclear if any other parameter and which other parameter is to included as the limitation of the claim. For the purpose of applying art, claim 6 is read without this cited limitation.
- c. Claim 8 recites the limitation of " ... include address identification data and/or the port and or the protocol used for sending". It renders the claim not clear in the interpretation of searching and applying arts. For the purpose of applying art, claim 8 is read as " ... include address identification data, the port and the protocol used for sending".

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Coss et al. (US 6098172 A), hereinafter referred as Coss.

- a. Regarding claim 1, Coss disclosed a method for sending a message from a first computer system C1 that belongs to an internal network, which is protected by a firewall to at least one other computer system C2 through the firewall (Fig. 1, 5A and 5B; claim 17; column 6, line 47-61: request a session from a source to a destination through a firewall), comprising: a) sending from the first computer system to the firewall, a request with data for a new connection to be opened between the first computer system C1 and at least one other computer system C2 for a message to be sent between said computer systems C1, C2 (claim 17; column 6, line 47-61: request a session from a source to a destination through a firewall), b) the firewall controls the data for the new connection via which the message is intended to be sent and, upon approval of the connection by the firewall, sending from the firewall to the first computer system C1, transformation information about the necessary modifications to be made in a message that is sent via the requested connection through the firewall, so that the message can pass through, the necessary modification including IP, protocol, TCP and/or port data (claims 1 and 2, column 5, lines 42-56: using session key for a request connection service; column 3-6, table: IPSEC protection; column 4, line 17-27: special encryption service; column 5, line 57-column 6, line 46: append session key; column 6, line 62-column 7, line 52: check for session key; column 9, line 62-column 10, line 59: encrypted channel), c) the first computer system C1 receiving the transformation information from the fire wall and applying the transformation information to the message to modify the message to be sent in accordance with the information sent from the firewall (claims 1 and 2, column 5, lines 42-56: using

session key for a request connection service; column 5, line 57-column 6, line 46: append session key; column 6, line 62-column 7, line 52: checking for session key), d) optionally, and before or after step c), sending from the first computer system to the firewall identification data of the connection for the message to be sent between said computer systems C1, C2 so that the connection for the message can be identified by the firewall and the message can pass the firewall (claim 17 and 18; column 2, line 18-28; column 8, line 3-67), e) the firewall receiving the identification data related the connection for the message (column 6, line 62-column 7, line 52: checking for session key), and f) sending the message from the first computer system C1 to the at least one other computer system C2 through the firewall (Fig. 5A and 5B; claim 17; column 6, line 62-column 7, line 52), the firewall associating the identification data with the connection for the message and letting the message through the firewall as long as the firewall associates the identification data with the connection for the message (column 6, line 62-column 7, line 52: using session key for search).

- b. Regarding claim 2, Coss disclosed the method according to claim 1 wherein the message to be sent between said computer systems C1, C2 is protected in step c) after it has been modified, whereby step d) is necessary and the data to be sent from the first computer system to the firewall includes the necessary information so that the connection for the message can be identified by the firewall (column 4, line 17-27; column 3-6, table; column 6, line 62-column 7, line 52).

- c. Regarding claim 3, Coss disclosed the method of claim 2 wherein the protection is made using the IP Sec system (column 3-6, table).
- d. Regarding claim 4, Coss disclosed the method according to claim 2 wherein the message to be sent is authenticated (column 3-6, table; column 1, line 43-49; column 8; line 46-50).
- e. Regarding claim 5, Coss disclosed the method according to claim 2 wherein the message to be sent is encrypted in step c) (claim 18; column 4, line 17-27; column 3-6, table; column 6, line 62-column 7, line 52).
- f. Regarding claim 6, Coss disclosed the method according to claim 1 wherein the information message in point a) contains data of the new connection to be opened between the first computer system C1 and at least one other computer system C2 in form of address identification data and possible other parameters (Fig. 5A and 5B; column 6, line 62-column 7, line 52).
- g. Regarding claim 7, Coss disclosed the method according to claim 6 wherein the possible other parameters are data about the port and the protocol used for sending (column 3-6, table; column 5, line 57-column 6, line 46; column 9, line 62-column 10, line 2).
- h. Regarding claim 8, Coss disclosed the method according to claim 1 wherein in step b) the modifications include address identification data and/or the port and or the protocol used for sending (column 3-6, table; column 4, line 17-27; column 9, line 62-column 10, line 2).

Art Unit: 2144

- i. Regarding claim 9, Coss disclosed the method according to claim 1 wherein the message is using the TCP/IP protocol (column 3-6, table; column 5, line 57-column 6, line 46).
- j. Regarding claim 10, Coss disclosed the method according to claim 1 wherein the message is sent via internet (claim 17; column 6, line 62-column 7, line 52).

Coss disclosed all limitations of claims 1-10. Claims 1-10 are rejected under 35 U.S.C.

102(e).



*Response to Arguments*

7. Applicant's arguments filed on 02/13/2006 have been fully considered, but they are not persuasive.

- a. Applicant alleged that neither Coss nor any other cited reference teaches or suggests the combination of the steps of: receiving transformation information from the firewall and applying the transformation information to the message to modify the message to be sent in accordance with the information sent from the firewall and the firewall associating the identification data, received from the first computer, with the connection for the message and letting the message through the firewall as long as the firewall associates the identification data with the connection for the message. As the alleged statement is related to the newly amended claim 1. The above rejection is updated to reflect the amended limitation. Coss has shown from a firewall point view how a connection through firewall is to be set up. Coss has shown that a firewall is using "session key" to record the established connection and is expected to receive the "session key" for further communication from the requester of connection establishment. It is clear that the session key must be made known to the requester for further communication through the firewall on the same connection. Thus Coss has the amended and argued limitation of claim 1. As applicant states that claims 2-10 depend upon claim 1, the argument and response applies to claims 2-10 as well.

***Remarks***

8. The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

- a. Shwed et al. (US 5835726 A) System for securing the flow of and selectively modifying packets in a computer network
- b. Reid et al. (US 6182226 B1) System and method for controlling interactions between networks
- c. Ylonen et al. (US 6438612 B1) Method and arrangement for secure tunneling of data between virtual routers
- d. R. Atkinson, NRL, RFC-1825 "Security Architecture for the Internet Protocol", August 1995
- e. R. Atkinson, NRL, RFC-1826 "IP Authentication Header", August 1995
- f. R. Atkinson, NRL, RFC-1827 IP Encapsulating Security Payload (ESP)", August 1995

*Conclusion*

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2144

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pas *pas*

*W. C. Vaughn, Jr.*  
WILLIAM C. VAUGHN, JR.  
PRIMARY EXAMINER